

REMARKS

Claims 9 to 18 are currently pending.

Applicants respectfully request reconsideration of the present application in view of this Supplemental/Replacement Response (which supplements/replaces the Amendment mailed on October 24, 2007).

Claims 9 to 18 were rejected under 35 U.S.C. 103(a) as obvious over Klatt (U.S. Patent 4,510,906) in view of Buck, U.S. Patent No. 5,267,752.

In rejecting a claim under 35 U.S.C. § 103(a), the Office bears the initial burden of presenting a *prima facie* case of obviousness. In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish *prima facie* obviousness, three criteria must be satisfied. First, there may be some suggestion or motivation to modify or combine reference teachings. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. In re Merck & Co., Inc., 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Still further, to reject a claim as obvious under 35 U.S.C. § 103, the prior art must disclose or suggest each claim feature and it must also provide a motivation or suggestion for combining the features in the manner contemplated by the claim. (See Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 934 (Fed. Cir. 1990), cert. denied, 111 S. Ct. 296 (1990); In re Bond, 910 F.2d 831, 834 (Fed. Cir. 1990)). Thus, the “problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem”, Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679 (Fed. Cir. 1998).

An accelerator pedal for road vehicles that is fitted with a positionable force pressure point that is noticeable by the driver is referred to in the Klatt reference. As characterized, during the vehicle’s acceleration process, a control unit constantly positions this force pressure point in the position having the most favorable fuel mileage. To this end, the control unit is influenced both by the engine speed and by the engine characteristic (Abstract; and col. 2, lines 46 to 61). According to one refinement, the driver is able to obtain a gear-shift recommendation via the

accelerator pedal. To this end, the control unit moves wedge 3 slightly back (to the left) as soon as a corresponding rotational speed is reached and the load conditions permit a shifting. In this way, the driver recognizes, without being distracted from traffic, that an upshift is expedient. The same effect can also be achieved by a short impulse -- i.e., a back and forth movement, that is applied to wedge 3 (col. 3, lines 1 to 15).

As admitted in the Final Office Action, the Klatt reference does not disclose the features of current claims 9 and 15, according to which *a characteristics function ascertains an associated specific fuel consumption from a resulting setpoint value for an output variable of the drive unit and a current engine speed, the specific fuel consumption is converted into a consumption per unit distance, and an additional characteristics function ascertains the haptic signaling as a function of the ascertained consumption per unit distance*. Additionally, and in contrast to the assertions of the Final Office Action, Klatt also does not disclose the features of current claims 9 and 15 according to which *different haptically signaled information is formed by different fuel consumption values, the different fuel consumption values respectively being represented by a haptic signal characteristic on the operating element, which characteristic has a maximum at the associated position of the operating element*.

First, it is to be established that in Klatt, haptically signaled information includes the achievement of an optimum engine operation efficiency -- as well as a gear-shift recommendation. Wholly unlike the subject matter of current claims 9 and 15, however, Klatt does not disclose the feature in which the different haptically signaled information is formed by different fuel consumption values, as provided for in the context of the presently claimed subject matter. Still further, the haptic signaling of different fuel consumption values is in noway suggested by the Klatt reference.

According to the claims 9 and 15, one position of the operating element is assigned to different fuel consumption values respectively, at which position the haptic signaling on the operating element has a maximum. In stark contrast, in Klatt, however, the same highest-efficiency information is always assigned to these different positions of the accelerator pedal. Thus, in Klatt, different efficiencies -- let alone fuel consumption values, are not assigned to the different positions of the accelerator pedal.

The secondary Buck reference refers to a method for consumption-oriented limitation of driving performance for electric vehicles. The method helps the driver to optimally utilize the energy reserve carried along. To this end, starting from the energy reserve available in each

instance, a permissible consumption per unit distance that is related to the residual distance is continuously ascertained, from which is determined in view of the road resistances a desired value that triggers a device for limiting driving performance. In addition to the known devices for limiting driving performance, such as defining a recommended maximum speed, an electronic accelerator pedal having a pedal travel that is subdivided into two angular ranges is provided, the second angular range requiring an increased actuating force and being assigned to a performance range that is regulated according to the setpoint value. The subdivision into two angular ranges is able to be set by a servomotor, as a function of the permissible consumption per unit distance (Abstract; and col. 4, lines 27 to 63).

Accordingly, Buck does not disclose the features of claims 9 and 15, according to which *different information is represented by unique haptic signaling at different positions of an operating element of the vehicle, different information being formed by different fuel consumption values and the different fuel consumption values respectively being represented by a haptic signal characteristic on the operating element, which characteristic has a maximum at the associated position of the operating element.* In Buck, any haptic signaling is restricted to the fact that in a performance range that is regulated due to the restriction of driving performance, the accelerator pedal requires an increased actuating force.

Thus, in stark contrast to the subject matter of claims 9 and 15, different information is not signaled haptically in the Buck reference -- let alone different fuel consumption values assigned to different positions of the operating element and represented there by a maximum of the haptic signaling, as provided for in the context of the presently claimed subject matter.

Thus, the Buck reference (whether taken alone or otherwise) does not disclose (nor suggest) the features of claims 9 and 15, according to which *a characteristics function ascertains an associated specific fuel consumption from a resulting setpoint value for an output variable of the driving unit and a current engine speed, the specific fuel consumption is converted into a consumption per unit distance, and a further characteristics function ascertains the haptic signaling as a function of the ascertained consumption per unit distance.*

The Buck reference does not disclose the features of claims 9 and 15 according to which a specific fuel consumption is ascertained, since it only refers to an average consumption per unit distance K – and not a specific fuel consumption. A further difference is that in the subject matter of claims 9 and 15, a resulting setpoint value for an output variable of the driving unit is predefined and a characteristics function ascertains the associated specific fuel consumption as a

function of this setpoint value for the output variable, and of a current engine speed. Conversely, in Buck, an average consumption per unit distance is predefined, from which a permissible value for the average speed is then determined as an output variable.

In Buck, only the correlation between the permissible average consumption per unit distance and the permissible average speed resulting from it may be referred to with the aid of Figure 3, for example. In contrast, in the subject matter of claims 9 and 15, the specific fuel consumption is ascertained not only as a function of a resulting setpoint value for an output variable of the driving unit, but also as a function of the current engine speed. A dependence on the current engine speed is not disclosed nor suggested by the Buck reference.

Furthermore, Buck does not disclose the feature of claims 9 and 15, according to which the specific fuel consumption is converted into a consumption per unit distance. The cited text at col. 3, lines 1 to 12, of Buck concerns only the consumption per unit distance, but does not disclose in any way a specific fuel consumption. As to claim 9, it has been slightly clarified to make plain that the conversion of the specific fuel consumption *is into* a consumption per unit distance is not clearly described. No new matter is added. Approval and entry are respectfully requested.

Finally, Buck does not disclose the haptic signaling as a function of a consumption per unit distance ascertained in accordance with the claims 9 and 15.

For the foregoing reasons, Klatt and Buck (whether taken alone or combined) does not disclose nor suggest the subject matter of claims 9 and 15, according to which different haptically signaled information is formed by different fuel consumption values, the different fuel consumption values being respectively represented by a haptic signal characteristic on the operating element, which characteristic has a maximum at the associated position of the operating element; a characteristics function ascertains an associated specific fuel consumption from a resulting setpoint value for an output variable of the driving unit and a current engine speed, and according to which the specific fuel consumption is converted into a consumption per unit distance, and according to which a further characteristics function ascertains the haptic signaling as a function of the ascertained consumption per unit distance.

In short, the subject matter of claims 9 and 15 does not concern the provision of a more specific characteristic for different driving conditions -- but rather a simple and less costly haptic signaling of different fuel consumption values. However, no reference to the haptic signaling of different fuel consumption values is disclosed nor suggested by the references as applied.

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Accordingly, claim 9 and its dependent claims are allowable.

Claim 15 includes features like those of claim 9, and is therefore allowable for the same reasons, as are its dependent claims.

Accordingly, claims 9 to 18 are allowable.

CONCLUSION

In view of the foregoing, it is respectfully submitted that all of the presently pending claims are allowable. It is therefore respectfully requested that the rejections (and any objections) be withdrawn. All issues raised by the Examiner having been addressed, an early and favorable action on the merits is respectfully requested.

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